DATASHEET

PACKETEER®

VISIBILITY | + | CONTROL | + | ACCELERATION | + | MANAGEMENT

Application Traffic Management System

Today's fast-moving enterprise relies on wide-area networks (WANs) to connect employees, customers, partners, and vendors. Are the WANs up to the challenge? As increasing amounts of e-mail, peer-to-peer traffic, and Web browsing consume WAN bandwidth, enterprise IT managers struggle to keep business-critical applications such as enterprise resource planning (ERP), customer-relationship management (CRM) and Voice-over-IP (VoIP) running at acceptable levels of performance. Adding bandwidth is a short-term solution: Traffic inevitably grows until performance again becomes an issue.

Packeteer's Application Traffic Management System gives IT managers a powerful, flexible tool that monitors, controls, and accelerates WAN traffic based on business priorities. Packeteer helps enterprises ensure their WANs deliver optimal performance, enhance productivity and provide a competitive advantage.

Gain Visibility into Networks and WAN Application Performance

Optimize Business Applications; Control or Block Unwanted Traffic

Accelerate Information Delivery via Compression

Increase Bandwidth Availability while Avoiding Added Costs

Align WAN Application Performance with Business Priorities

Take Charge of WAN Traffic

Packeteer puts enterprise IT managers back in charge of their WANs with:

Visibility—Packeteer automatically classifies and measures hundreds of types of applications that may be traversing WAN links. Through detailed analysis of network activity, Packeteer reveals the source of complex WAN application performance problems.

Control—Using a comprehensive set of application and network performance metrics, Packeteer adapts application traffic to available bandwidth using policy rules that reflect business priorities.

Acceleration—Packeteer boosts the performance of high-priority applications through intelligent use of traffic compression. Compression gives an extra performance edge that translates into increased productivity and user satisfaction.

Enhance Enterprise Productivity

Enterprises benefit from Packeteer's ability to:

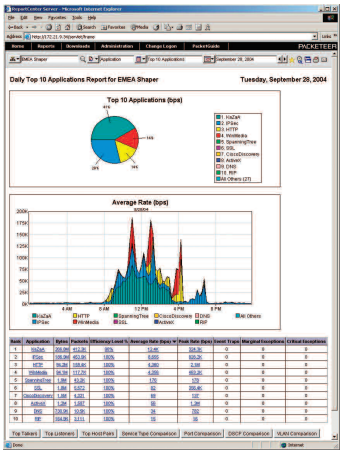
Protect Applications—Packeteer gives IT managers complete control over bandwidth, applications, and users. Now enterprises can ensure peak performance for their business-critical applications.

Strengthen Network Security—Packeteer helps identify and contain worm, virus, and DoS attacks to maintain network integrity and minimize business disruptions.

Improve Quality of Service—As enterprises add powerful new applications such as SAP and VoIP, Packeteer provides the needed performance and protection to ensure successful deployment.

Enable IT to Operate More Efficiently— Packeteer can automatically initiate pre-assigned actions to respond rapidly to abnormal network activity, thus reducing IT time, cost, and complexity.

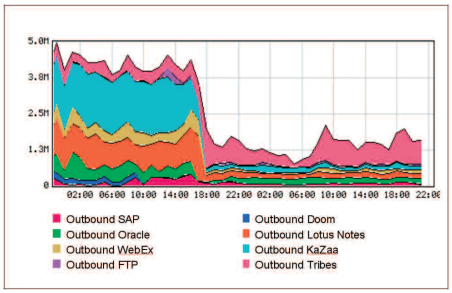
Optimize WAN Performance with a System that Delivers Unmatched Visibility, Control, and Acceleration



Visibility: Comprehensive Network Monitoring

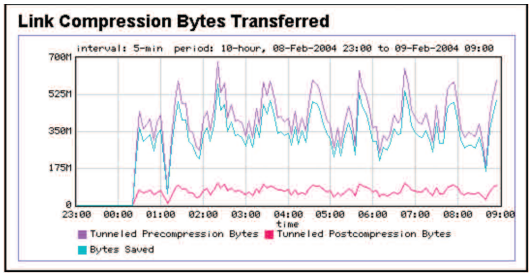
Having an accurate picture of network traffic is the first step to WAN optimization. Packeteer monitors and classifies traffic based on Layer-7 application knowledge and traditional Layer 2-4 criteria. IT managers can establish thousands of classes of traffic for precise network monitoring and management.

Once traffic is classified, Packeteer provides detailed analysis of network utilization, application performance and response time, and network effciency. In-depth “per flow” diagnostics pinpoint the source of complex problems such as LAN-WAN bottlenecks and reveal the sources of virus and worm traffic.



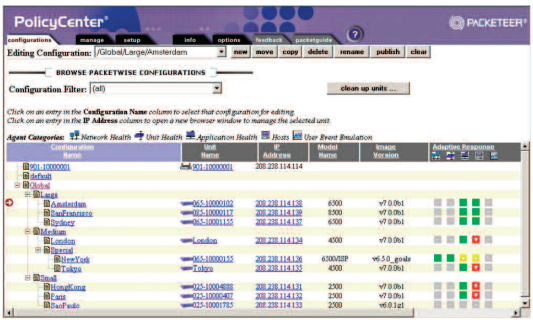
Control: Precise Bandwidth Management

With comprehensive visibility into WAN traffic, Packeteer can protect the performance of important applications by giving IT managers complete control of network traffic. Policy rules associate each application with parameters such as priority, minimum and maximum bandwidth, and per-session guarantees. Now IT managers can ensure the availability of bandwidth for key applications, relegate non critical traffic to remaining available bandwidth, and partition the user community to increase overall network performance.



Acceleration: Intelligent Performance Enhancement

With visibility and control in place, IT managers can focus on maximizing their existing WAN infrastructure through the targeted application of Packeteer’s compression technology. To optimize available bandwidth and performance, Packeteer automatically applies the best-suited compression algorithm based on application type. Bandwidth usage for selected applications can be reduced by as much as a factor of 10, freeing traffic capacity that can be allocated to other applications.



Centralized Reporting and Management

Packeteer’s centralized management software—PolicyCenter and ReportCenter —consolidates reporting and management to a central location. These applications help IT groups manage Packeteer deployments in large, multi-site environments. For more information, see Packeteer’s Centralized Management datasheet.

Increase Enterprise Productivity

Improve Useability of Business-Critical Applications

The performance of applications such as ERP and CRM can be impacted by less time-critical business and recreational network traffic, resulting in degraded performance and user dissatisfaction. Packeteer helps optimize WAN application performance by guaranteeing bandwidth for business-critical traffic. Packeteer classifies traffic into meaningful categories: for example, Citrix by published application, Oracle by database name, and Web applications by Web service name. Intelligent policy rules keep critical traffic flowing and out of WAN-edge queues. With Packeteer's granular monitoring and control, IT managers gain unprecedented ability to align network access and use with business priorities.

Adapt Automatically to Network Changes

The enterprise network is always subject to large variations in traffic usage, no matter how well-managed it is. Employee hiring, application deployment and expansion, overloaded servers, maintenance, external attacks—all can cause huge usage swings and affect resource performance.

Packeteer addresses this challenge with its unique Adaptive Response technology. Integrated into Packeteer's core technology, Adaptive Response automatically detects and adapts to changing network conditions. The technology also discovers and analyzes new applications, tracks network efficiency, and takes actions from sending an alert or starting a packet capture to creating a partition to contain abnormal activity.

Strengthen Network Security

Worms, viruses, and DoS attacks constantly threaten network operation and integrity. While defenses often focus on the WAN-LAN perimeter, smart management of network traffic provides an additional level of resource protection.

Packeteer quickly spots anomalous activity that accompanies an attack, pinpoints the infected hosts, and limits the impact on user productivity and application performance. Packeteer automatically discovers rogue applications, even those masking their presence through packet tunneling or port hopping. As an adjunct to other security measures, Packeteer helps IT managers safeguard their networks from ever-present security threats.

Ensure Voice-Over-IP Performance

VoIP is a response-sensitive and bandwidth-intensive application. Packeteer enables guaranteed availability and prioritization of bandwidth, which helps assure consistency and quality of IP voice connections and greater user satisfaction. Dynamic allocation ensures that bandwidth is allocated at call initiation and released at call termination for use by other calls or critical applications.

Extend MPLS to the WAN Edge

MPLS based IP VPNs are rapidly replacing frame relay as the dominant protocol for WANs. But as applications get more diverse and single-PVC connections remove monitoring granularity, it becomes more difficult for enterprises to gain the greatest performance and value from MPLS.

Packeteer helps by leveraging its application awareness to apply packet markings for DiffServ, Type of Service (ToS), and MPLS. This ensures that traffic is mapped to the right Class of Service (CoS) for transit across the carrier's network. With the ability to monitor network traffic and measure end-to-end performance, Packeteer helps IT managers properly map and track critical applications to better-performing service classes.

Specifications

Series	1200	1550	2500	6500	9500	10000
Maximum Capacity						
IP flows (TCP/Other IP)*	4,000/2,000	5,000/2,500	20,000/10,000	100,000/50,000	400,000/200,000	400,000/200,000
Throughput	2Mbps	2Mbps	10Mbps	100Mbps	200Mbps	1Gbps
Dynamic partitions	**	**	512	5,000	20,000	20,000
Classes	64	256	512	1,024	2,048	2,048
Static partitions	32	128	256	512	1,024	1,024
Policies	64	256	512	1,024	2,048	2,048
IP hosts*	5,000	5,000	10,000	25,000	200,000	200,000
Tunnels	5	10	30	50	300	300
Options & Upgrades						
Monitoring Only	N/A	Yes	Yes	Yes	Yes	Yes
Shaping Link Size	128K, 512K, 2M	128K, 512K, 2M	128K, 512K, 2M, 6M, 10M	10M, 45M, 100M	45M, 100M, 200M	45M, 100M, 200M, 310M, 620M, 1G
Compression***	2M	2M	4M	10M	45M	155M
Interfaces						
Network Interfaces (in and out)	2x10/100Base-T	2x10/100Base-T	2x10/100Base-T	2x10/100Base-T	2x10/100/1000Base-T; 2x1000Fiber SFP–SX (275m) or LX (5km or 20km)	
LAN Expansion Modules (2 Slots Available)	No	No	2x10/100Base-T	2x10/100Base-T (6500 only); 2x10/100/1000Base-T; 2x1000Fiber SFP-SX (275m) or LX (5km or 20km)		
Console Port	All have RS-232 (AT-compatible) with male DB-9 connectors					
Dimensions-All are 19" rack-mountable						
Height	1U or 1.75 in (4.45 cm)	1U or 1.75 in (4.45 cm)	2U or 3.5 in (8.89 cm)	2U or 3.5 in (8.89 cm)	2U or 3.5 in (8.89 cm)	2U or 3.5 in (8.89 cm)
Width	17 in (43.18 cm)	17 in (43.18 cm)	17 in (43.18 cm)	17 in (43.18 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)
Depth	14 in (35.56 cm)	14 in (35.56 cm)	14 in (35.56 cm)	15.25 in (38.74 cm)	19.25 in (48.90 cm)	20.3 in (51.43 cm)
Weight	11 lb (4.99 kg)	11 lb (4.99 kg)	16 lb (7.26 kg)	17 lb (7.71 kg)	27 lb (12.25 kg)	33 lb (14.97 kg)
Power						
Power Supply	100/240 VAC; 50/60Hz, 2A	100/240 VAC; 50/60Hz, 2A	100/240 VAC; 50/60Hz, 2A	100/240 VAC; 50/60Hz, 2A	100/240 VAC; 50/60Hz, 6A	100/240 VAC; 50/60Hz, 6A
Dual, Redundant Load Sharing	No	No	No	Yes	Yes; Hot-swappable	Yes; Hot-swappable
Additional Features						
Interoperability	XML, XML and CGI APIs, SNMP MIB, SNMP event traps; HP OpenView, InfoVista, Concord eHealth, Aprisma Spectrum, Micromuse Netcool					
Device Management	RS-232 compatible (DB-9 connector) console port, Web browser interface, Telnet CLI, SNMP Packeteer MIB and MIB-II support					
Agency Approval						
Safety	CAN/CAS-C22.2 No. 1950-95/UL 1950, IEC 60950, EN 60950					
Emissions	AS/NZS 3548 Class A; AS/NZS 4252.1; ICES-003, Class A; EMC Directive 89/336/EEC; EN 300 386 v1.3.1: 2001 Telecom EMC standard; EMC Directive 73/23/EEC; EMC Directive 93/68/EEC; EN 55022: 1998 Class A; EN 61000-3-2:1995_A1(98) + A2(98), & prA14(00); EN 61000-3-3:1995; EN 55024:1998; VCCI:2002, Class A; KN55022 Class A KN6100-4-2,3,4,5,6,8,11; GOST-R 60950-2002; GOST-R 51318.22-99, .24-99; PSB; FCC 47 CFR pt 15, subpt B, Class A					
Immunity	IEC 60950:1999 3rd Edition; EN 60950:2000; UL 60950:2000; CAN/CSA C22.2 No. 60950-00; EN 60825-1,-2 Class I Laser					

Note: Not all capacity specifications can be maximized simultaneously.

* Packeteer can support more hosts and flows; these figures represent ideal maximums for producing optimal results; numbers are rounded up or down to the nearest thousand. These maximums represent concurrent flows. Performance may vary due to the number of new flows, traffic type, traffic mix, and other conditions unique to each deployment.

** No extra partitions are specifically allocated for dynamic partitions. The 1200 and 1550 have a pool of partitions to be shared between static and dynamic partitions.

*** Refers to post-compressed traffic rates - maximum compressed throughput specifications for Packeteer are lower when compression is enabled due to the extra processing power required to compress traffic.

Product Features

Visibility

- **Classify traffic by:**
  - Application signature
  - Protocol, port, IP, MAC address
  - URL or wildcard
  - Host name, speed range
  - LDAP host lists
  - ISL or 802.1p/q VLAN, MPLS, ToS, DSCP
  - Direction source, destination
  - Mime type or web browser
  - Oracle database
  - Citrix published application
  - Custom Web Service
- **Detect:**
  - Dynamic port assignments
  - Transactions with migrating port assignments
  - Applications using the same port
  - Traffic types generating the most traffic
- **Analyze response time:**
  - Server and network delays
  - Slowest clients and servers
  - Top bandwidth usage by application and user
  - Retransmission bandwidth waste
  - Dropped packets
- **Manage service-level agreements:**
  - Set response-time commitments
  - Track service-level compliance

Control

- **Avoid DoS attacks:**
  - Contain attacks with classification and control
  - Stop SYN floods
- **Control applications:**
  - Set min/max per application
  - Protect or cap traffic by class
  - Protect latency-sensitive sessions
  - Deliver minimum rate for individual sessions
- **Control sessions and users:**
  - Set min/max per session/user
  - Dynamically control per-user bandwidth
  - Allow sessions prioritized access to excess bandwidth
- **TCP Rate Control:**
  - Control inbound/outbound traffic
  - Maximize throughput with smooth, even flow rate
  - Reduce in/outbound latency
  - Forecast packet inter-arrival times
  - Adjust window size
  - Meter acknowledgement
- **UDP Rate Control:**
  - Manage inbound/outbound traffic to specific rate
  - Guarantee bandwidth
  - Control jitter

Acceleration

- **Apply compression:**
  - Application knowledge allows selection of the most effective compression algorithm
  - Adaptive algorithms learn and dynamically build pattern libraries across packets
  - Limit compression to compressible data
- **Manage tunnels:**
  - Dynamically discover and automatically establish compression tunnels
  - Keep virtual pipe filled based on predictive algorithms
  - Maximize network utilization
- **Manage latency:**
  - Adapt to different application flows
  - Ensure optimum application performance through advanced traffic management technologies

Note: The 1200 Series requires a central site Packeteer appliance to compile response time statistics

Copyright ©2005 Packeteer, Inc. All rights reserved. Packeteer, the Packeteer logo, PacketWise, PacketShaper, PacketShaper Xpress, PacketSeeker, ReportCenter, and PolicyCenter are trademarks or registered trademarks of Packeteer, Inc., in the United States and other countries. All other company trademarks are the property of their respective owners. No part of this document may be reproduced, photocopied, stored on a retrieval system, transmitted, or translated into another language without the express written consent of Packeteer, Inc. PART NO. 1115.B 2/05

PACKETEER®

10201 N. De Anza Blvd.
Cupertino, CA 95014
Tel: +1.408.873.4400
Fax: +1.408.873.4410
info@packeteer.com
www.packeteer.com